



RECEIVED  
CENTRAL FAX CENTER

JAN 13 2006

**North America  
Intellectual Property Corporation**

P.O. BOX 506, Merrifield, VA 22116, U.S.A.

Voice Mail: 302-729-1562

FAX: 806-498-6673

e-mail: [winstonhsu@naipo.com](mailto:winstonhsu@naipo.com)

Customer No.: 27765

**Fax To: Dung A. Le  
Art Unit: 2818**

**Tel.: (571) 272-1784  
Fax: (571) 273-8300**

**From: Winston Hsu, Registration No. 41,526**

**Serial No.: 10/707,029**

**Attorney Docket No.: NTCP0023USA**

**Subject: Response to the Office Action mailed on 12/22/2005**

**Total Pages: 9 pages (including cover page)**

**Winston Hsu 01/13/2006**

**NTCP0023USA0\_\_A2\_\_1**

RECEIVED  
CENTRAL FAX CENTER

JAN 13 2006

PTO/SB/21 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

|   |                      |                        |             |
|---|----------------------|------------------------|-------------|
| <b>TRANSMITTAL FORM</b><br><br>(to be used for all correspondence after initial filing) | Application Number   | 10/707,029             |             |
|   | Filing Date          | 11/16/2003             |             |
|   | First Named Inventor | Ping Hsu               |             |
|   | Art Unit             | 2818                   |             |
|   | Examiner Name        | Dung A. Le             |             |
| Total Number of Pages in This Submission  | 8                    | Attorney Docket Number | NTCP0023USA |

| ENCLOSURES (Check all that apply)   |   |  |
|---|---|--|
| <input checked="" type="checkbox"/> Fee Transmittal Form<br><input type="checkbox"/> Fee Attached<br><input checked="" type="checkbox"/> Amendment/Reply<br><input type="checkbox"/> After Final<br><input type="checkbox"/> Affidavits/declaration(s)<br><input type="checkbox"/> Extension of Time Request<br><input type="checkbox"/> Express Abandonment Request<br><input type="checkbox"/> Information Disclosure Statement<br><input type="checkbox"/> Certified Copy of Priority Document(s)<br><input type="checkbox"/> Reply to Missing Parts/Incomplete Application<br><input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53 | <input checked="" type="checkbox"/> Drawing(s)<br><input type="checkbox"/> Licensing-related Papers<br><input type="checkbox"/> Petition<br><input type="checkbox"/> Petition to Convert to a Provisional Application<br><input type="checkbox"/> Power of Attorney, Revocation<br><input type="checkbox"/> Change of Correspondence Address<br><input type="checkbox"/> Terminal Disclaimer<br><input type="checkbox"/> Request for Refund<br><input type="checkbox"/> CD, Number of CD(s) _____<br><input type="checkbox"/> Landscape Table on CD | <input type="checkbox"/> After Allowance Communication to TC<br><input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences<br><input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)<br><input type="checkbox"/> Proprietary Information<br><input type="checkbox"/> Status Letter<br><input type="checkbox"/> Other Enclosure(s) (please identify below): |
| Remarks: _____  |   |  |

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

|              |   |          |        |
|--------------|---|----------|--------|
| Firm Name    | North America International Patent Office |          |        |
| Signature    | <i>Winston Hsu</i>                        |          |        |
| Printed name | Winston Hsu                               |          |        |
| Date         | 1/13/2006                                 | Reg. No. | 41,526 |

## CERTIFICATE OF TRANSMISSION/MAILING

|   |                    |      |           |
|---|--------------------|------|-----------|
| I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below: |                    |      |           |
| Signature   | <i>Janice Chen</i> |      |           |
| Typed or printed name   | Janice Chen        | Date | 1/13/2006 |

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

**RECEIVED**  
**CENTRAL FAX CENTER**

**JAN 13 2006**

PTO/SB/17 (12-04v2)

Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995 no persons are required to respond to a collection of information unless it displays a valid OMB control number

Effective on 12/09/2004.

Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

# **FEE TRANSMITTAL**

## **For FY 2005**

☐ Applicant claims small entity status. See 37 CFR 1.27

**TOTAL AMOUNT OF PAYMENT (\$)** 0.00
**Complete if Known**

|                      |             |
|----------------------|-------------|
| Application Number   | 10/707,029  |
| Filing Date          | 11/16/2003  |
| First Named Inventor | Ping Hsu    |
| Examiner Name        | Dung A. Le  |
| Art Unit             | 2818        |
| Attorney Docket No.  | NTCP0023USA |

**METHOD OF PAYMENT (check all that apply)**
☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): \_\_\_\_\_

☒ Deposit Account Deposit Account Number: **50-3105** Deposit Account Name: North America International Patent Office

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee

☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments

**WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.
**FEE CALCULATION****1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

| Application Type | FILING FEES  |          | SEARCH FEES  |          | EXAMINATION FEES |          | Fees Paid (\$) |
|------------------|--------------|----------|--------------|----------|------------------|----------|----------------|
|                  | Small Entity | Fee (\$) | Small Entity | Fee (\$) | Small Entity     | Fee (\$) |                |
| Utility          | 300          | 150      | 500          | 250      | 200              | 100      |                |
| Design           | 200          | 100      | 100          | 50       | 130              | 65       |                |
| Plant            | 200          | 100      | 300          | 150      | 160              | 80       |                |
| Reissue          | 300          | 150      | 500          | 250      | 600              | 300      |                |
| Provisional      | 200          | 100      | 0            | 0        | 0                | 0        |                |

**2. EXCESS CLAIM FEES**

| Fee Description                                    | Fee (\$) | Small Entity Fee (\$) |
|--|----------|-----------------------|
| Each claim over 20 (including Reissues)            | 50       | 25                    |
| Each independent claim over 3 (including Reissues) | 200      | 100                   |
| Multiple dependent claims                          | 360      | 180                   |

| Total Claims | Extra Claims | Fee (\$) | Fees Paid (\$) | Multiple Dependent Claims | Fee (\$) | Fees Paid (\$) |
|--------------|--------------|----------|----------------|---------------------------|----------|----------------|
|--------------|--------------|----------|----------------|---------------------------|----------|----------------|

- 20 or HP = \_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_

HP = highest number of total claims paid for, if greater than 20.

| Indep. Claims | Extra Claims | Fee (\$) | Fees Paid (\$) |
|---------------|--------------|----------|----------------|
|---------------|--------------|----------|----------------|

- 3 or HP = \_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_

HP = highest number of independent claims paid for, if greater than 3.

**3. APPLICATION SIZE FEE**

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

| Total Sheets | Extra Sheets | Number of each additional 50 or fraction thereof | Fee (\$) | Fees Paid (\$) |
|--------------|--------------|--|----------|----------------|
|--------------|--------------|--|----------|----------------|

- 100 = \_\_\_\_\_ / 50 \_\_\_\_\_ (round up to a whole number) x \_\_\_\_\_ = \_\_\_\_\_

**4. OTHER FEE(S)**

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): \_\_\_\_\_

**Fees Paid (\$)****SUBMITTED BY**

|                   |                    |                                   |           |           |            |
|-------------------|--------------------|-----------------------------------|-----------|-----------|------------|
| Signature         | <i>Winston Hsu</i> | Registration No. (Attorney/Agent) | 41,526    | Telephone | 3027291562 |
| Name (Print/Type) | Winston Hsu        | Date                              | 1/13/2006 |           |            |

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

RECEIVED  
CENTRAL FAX CENTER

JAN 13 2006

**METHOD FOR FABRICATING A DEEP TRENCH CAPACITOR OF DRAM  
DEVICE**

Appl. No. : 10/707,029 Confirmation No. 1028  
Applicant : Ping Hsu  
Filed : November 16, 2003  
TC/A.U. : 2818  
Examiner : Dung A. Le  
Docket No. : NTCP0023USA0  
Customer No. : 27765

Commissioner for Patents  
P.O. Box 1450  
Alexandria VA 22313-1450

**AMENDMENT**

5 Sir:

In response to the Office action of December 22, 2005, please amend the above-identified application as follows:

**Amendments to the Specification** begin on page 2 of this paper.

10 **Amendments to the Drawings** begin on page 4 of this paper and include both an attached replacement sheet and an annotated sheet showing changes.

**Remarks/Arguments** begin on page 5 of this paper.

**An Appendix** including amended drawing figures is attached following page 5 of this paper.